



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,542	10/26/2001	David Allen Pane	MCA-521 US	6782

25182 7590 07/14/2003

MILLIPORE CORPORATION  
290 CONCORD ROAD  
BILLERICA, MA 01821

EXAMINER
----------

HE, AMY

ART UNIT	PAPER NUMBER
----------	--------------

2858

DATE MAILED: 07/14/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/010,542

Applicant(s)

PANE ET AL.

Examiner

Amy He

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because it contains informality phrase "comprises" on lines 4 and 6. Correction is required. See MPEP § 608.01(b).

### ***Drawings***

2. The drawings are objected to. See attached Draftsperson's Patent Drawing Review (PTO 948) for details. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 9 is objected to because "the photo-irradiation in steps (b) and (d) lacks antecedent basis. Replace "(b) and (d)" with --(c)--. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-2, 4-6, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Blades et al. (U. S. Patent NO. 5, 047, 212).

Referring to claim 1, Blades discloses a device (in Figure 11) useful in the photo-oxidation of a sample liquid and in the measurement of the oxidized carbon content thereof, the device comprising:

a cell (sample cell, abstract, line 3) comprising a rigid light-transmissive outer wall (64, 66 and 83) enclosing a continuous predetermined internal volume, the transmissivity of the rigid outer wall being sufficient to allow the passage therethrough of photo-irradiation of an intensity sufficient for effecting said photo-oxidation of said sample liquid when said sample liquid is loaded into said continuous predetermined internal volume (column 11, lines 15-19);

at least two elongate probes (60 and 62) penetrating through said rigid outer wall and extending substantially into said continuous predetermined internal volume, the probes collectively capable of measuring the temperature and the conductivity (using cond/temp electronic in Figure 11) of said sample liquid, at least one of the elongate probes (62) being hollow (since the temperature sensor is contained inside electrode 62, part of the electrode 62 is considered hollow to make space for fitting in the temperature sensor) at least partially along its length; and

a temperature sensitive element (82), capable of providing a temperature-dependent electrical signal, positioned inside one of said hollow elongate probes (column 11, lines 3-4).

Referring to claim 6, it is the method claim corresponding to the rejected apparatus claim (claim 1). It is rejected for the same reason as stated above for the rejection of the apparatus claim.

Referring to claims 2 and 8, Blades discloses a total of two elongate probes, the elongate probes configured as paired electrodes (electrodes 60 and 62 in Figure 11) that function together for said measurement of said conductivity (column 10, lines 18-20).

Referring to claim 4, Blades discloses an inlet (60b in Figure 11) for loading sample liquid into said continuous predetermined internal volume, and an outlet (60a in Figure 11) for removing sample liquid loaded from said continuous predetermined internal volume.

Referring to claim 5, Blades discloses a rigid outer wall partially made of fused quartz (fused silica, column 10, lines 29-30).

Referring to claim 9, Blades discloses that the photo-irradiation is ultraviolet photo-irradiation (column 10, line 20).

Referring to claim 10, Blades discloses water as the sample liquid (column 10, line 8).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2858

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blades et al. (U. S. Patent NO. 5, 047, 212).

Referring to claims 3 and 7, Blades discloses two probes (60 and 62 in Figure 11) with one temperature sensitive element (82 in Figure 11) disposed inside one probe (electrode 62). Blade does not disclose a third elongate probe positioned substantially between said pair of elongate probes, containing the temperature sensitive element. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Blades to use more than two electrodes, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. See *St Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy He whose telephone number is (703) 305-3360. The examiner can normally be reached on 8:30am-5pm Monday through Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, N. Le can be reached on (703) 308-0750.

The official Fax numbers for the organization are (703-872-9318) Before-Final and (703-872-9319) After-Final Office actions. Any inquiry of a general nature relating to

Application/Control Number: 10/010,542

Page 6


Art Unit: 2858

this application should be directed to the receptionist at (703) 305-4900.

AH

AH

June 27, 2003

  
JAY PATIDAR  
PRIMARY EXAMINER